



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
OREGON OPERATIONS OFFICE
805 SW Broadway, Suite 500
Portland, Oregon 97205

July 10, 2009

Mr. Robert Wyatt
Northwest Natural & Chairman, Lower Willamette Group
220 Northwest Second Avenue
Portland, Oregon 97209

Re: Portland Harbor Superfund Site; Administrative Order on Consent for Remedial Investigation and Feasibility Study; Docket No. CERCLA-10-2001-0240 – Screening of Disposal Facilities for the Feasibility Study

Dear Mr. Wyatt:

EPA has reviewed the Screening of Disposal Facilities for the Feasibility Study (Disposal Facility Screening Memo). This screening memo was submitted to EPA on June 18, 2009 and represents a follow-up to the Draft Disposal Site "Working List" submitted in June 2008. Overall, the sites evaluated in the Disposal Facility Screening Memo represent viable disposal facilities for the long-term management of contaminated sediments from the Portland Harbor site. In addition, EPA concurs with the conclusion that the Roosevelt Regional Landfill and the Columbia Ridge Landfill are the most viable existing upland disposal locations due the ability to transport contaminated sediments via barge and/or rail and the ability of the landfills to accept materials containing free liquids. However, EPA also believes that all five of the upland disposal sites and the generic Portland Harbor upland disposal location should be retained for evaluation in the Portland Harbor feasibility study (FS). In addition, EPA agrees that the two confined disposal facilities (CDFs) identified (Terminal 4 and Swan Island Lagoon) are the most viable near shore disposal options. Finally, because it is unclear which of the four confined aquatic disposal (CAD) facilities evaluated are the most viable, all four CAD sites should be retained for evaluation in the Portland Harbor FS.

At this time, there is considerable uncertainty regarding the evaluation of disposal sites in the Portland Harbor FS. For example, disposal volume estimates are not available, we do not have the results of the chemical mobility testing and the regulatory and/or management requirements that may apply to the disposal of contaminated sediments have not been identified. As a result, the Disposal Facility Screening Memo is considered an initial step in assessing the feasibility of various upland disposal options and further screening of disposal options is not possible at this time.

EPA has also identified a number of considerations that must be taken into account during the evaluation of sediment disposal options in the comments provided below:

Comments:

- 1) Volume estimates for Ross Island Lagoon should be developed for the Portland Harbor FS.
- 2) A table similar to the CAD site volume estimate should be added for the CDFs which depicts the CDF volume relative to berm length, height and width.
- 3) It is unclear that disposal at Hillsboro Landfill is the “most cost effective upland disposal option” if the costs of dewatering sediments and transport via truck is taken into account. Further evaluation of the total costs associated with the disposal of contaminated sediments at the Hillsboro Landfill will be required in the FS.
- 4) As noted in the text of the Disposal Facility Screening Memo, the Chemical Waste Management facility in Arlington (subtitle C landfill) may be viable option for limited quantities of material that are unsuitable for disposal in a subtitle D landfill, CDF and CAD. The results of the chemical mobility testing and other site information will need to be evaluated to determine which material if any Portland Harbor material must be disposed of in a Subtitle C Landfill.
- 5) Many of the ARARs identified for the CDF sites may also need to be considered for the CAD sites (e.g., River and Harbors Act and Floodplain Management). The Portland Harbor FS should include a full evaluation of cost and implementability consequences associated compliance with Section 404 of the Clean Water Act (e.g., mitigation), the endangered species act (e.g., consultation), and the Floodplain Management Executive Order (e.g., flood rise impacts).
- 6) Table 3 identifies a number of issues related to the long-term effectiveness and permanence such as the potential for riverbed shears during high flow events and prop wash due to vessel traffic. However, under overall protection, Table 3 states that “a CAD facility design could be developed that provides an acceptable level of protection.” Further discussion of those design considerations will be required in the Portland Harbor FS.
- 7) The tables in the Disposal Facility Screening Memo compare facilities within each category (upland disposal, CDF, CAD). The relative costs, feasibility and effectiveness of each disposal option must be evaluated against one another in the Portland Harbor FS.
- 8) Further documentation of disposal costs will be required in the Portland Harbor FS. Estimated costs will be required to evaluate cost effectiveness. This includes the costs associated with mitigation due to Clean Water Act and Floodplain Management.
- 9) Construction of near-shore CDF or CAD facilities will require design and long-term operation and maintenance that ensures that contaminated material will not be re-released following placement. Long-term operation and maintenance must be evaluated in the Portland Harbor FS.
- 10) The Columbia River and Ross Island CADs represent very different environments (e.g., lagoon vs. river channel). As a result, the potential for releases during the placement of material in a CAD may be very different.
- 11) EPA has maintained that disposal of contaminated sediments is not a water-dependant activity under Section 404 of the Clean Water Act. Non-water-dependant activities are presumed to have practicable alternatives, and the implementing party has the responsibility of demonstrating that there is no practicable alternative. Although cost can

be an important factor in the 404 practicability analysis, cost by itself does not meet the bar as demonstrating impracticability. In fact, experience has repeatedly demonstrated that the relative costs of generic upland disposal and generic in-water disposal are roughly equivalent and that site specific situations and circumstances are typically the crucial determinants for compliance.

- 12) The Portland Harbor FS should incorporate a harbor-wide perspective regarding the evaluation of disposal sites to avoid critical habitat areas, minimize adverse impacts on habitat generally and maximizing the potential for habitat improvements through, for example, the creation of shallow-water habitat.
- 13) The Portland Harbor FS will require more detailed information regarding the in-water disposal sites including location, nearby features, potential future land-use etc.
- 14) The Disposal Facility Screening Memo states that the Columbia River CAD site may have “marginal advantages” for long-term effectiveness relative to the other CAD sites. Additional analysis of long-term effectiveness in the Portland Harbor FS will be required to support this position.
- 15) Three of the four CAD sites are expected to experience significant shear forces due to their location in the main Willamette and Columbia River channels. The potential for erosion due to river flow and prop wash should be evaluated thoroughly in the Portland Harbor FS.
- 16) EPA acknowledges that the community may express reservations regarding the in-water disposal contaminated sediments. Although community acceptance is not considered at the screening stage and is generally considered a modifying criteria, the Portland Harbor FS will need to consider the potential for community acceptance at some level.

The above comments should be considered as we move forward with the development and screening of remedial alternatives. If you have any questions, please contact Chip Humphrey at (503) 326-2678 or Eric Blischke (503) 326-4006. All legal inquiries should be directed to Lori Cora at (206) 553-1115.

Sincerely,

Chip Humphrey
Eric Blischke
Remedial Project Managers

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